## 〈特別記念プログラム 1〉

(21世紀の香粧品 Ⅰ—効能をめぐる規制と科学のクロストーク)

## 化粧品の効能評価と測定技術

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## **Bioengineering Techniques for Efficacy Test of Cosmetic Products**

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## Abstract

The efficacy test of cosmetics is getting popular in cosmetic scientists because the bounds of cosmetic virtue are expanded and the proof data are needed to claim the new effects since April in 2001. Bioengineering techniques which is closely related to the substantiation of usefulness of cosmetics have been well-developed especially in the field of clinical dermatology to examine the skin condition, function, and internal structure non-invasively. In this paper I describe how these non-invasive techniques are applied to efficacy tests such as skin hydration, dry skin, wrinkles, depigmentation, and skin dullness. The possibility of application of new technology which are *in vivo* confocal microscopy and optical coherence tomography to efficacy tests is also mentioned.

Key words: efficacy test, non-invasive methods, bioengineering techniques, skin hydration, wrinkle.